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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,405	08/27/2001	Kenneth Alan Pieroni	CHMP-102D	5474
21272	7590	07/27/2005	EXAMINER	
MORLAND C FISCHER 2030 MAIN ST SUITE 1050 IRVINE, CA 92614			GARBER, CHARLES D	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

**Office Action Summary**

Application No.

09/939,405

Applicant(s)

PIERONI ET AL.

Examiner

Charles D. Garber

Art Unit

2856

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-18, 29 and 32-34 is/are pending in the application.
- 4a) Of the above claim(s) 11-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29 and 32-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 29, 32-34 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Westervelet et al. (US Patent 3,872,712) in view of Mieczkowski et al. (US Patent 5,898,108), Arnaud et al. (US Patent 4,198,374) and Gross (US Patent 5,275,144).

Regarding claims 29 and 32, Westervelt discloses a dynamic air flow comparator system that may be used for testing workpieces for leakage.

Workpieces may include “transmission housings, power cylinders, parts carrying seals or any of a wide variety of other items” according to Westervelt (Background), but not expressly testing fuel vapor recovery systems.

Mieczkowski teaches using a flow measurement device to test an evaporative emission system (including a fuel vapor recovery charcoal canister) for both proper purge flow as well as the system’s ability to maintain pressure per EPA requirement (abstract and column 1 lines 35-43).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to test a fuel vapor recovery system for its ability to maintain pressure (e.g. against leaks) because this is an EPA requirement.

Westervelt further discloses alternatively connecting the workpiece 50 and reject calibration leak 35 (leak tolerance standard) to a pressure source at air supply inlet 36 and to flow sensors 17 and 62. Westervelt uses air (abstract) rather than an inert gas.

Mieczkowski teaches nitrogen is a suitable gas for pressuring a fuel vapor recovery system of a motor vehicle for leak testing (column 6 lines 60-61 and column 2 lines 14-18). Nitrogen is an inert gas.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to leak test using nitrogen, an inert gas, to pressurize a system under test as nitrogen is a “suitable” gas and will not react chemically with fuel vapors in the system being tested.

Art Unit: 2856

Westervelt further discloses flow sensor 62 is a visual flow indicator that may be used in conjunction with the automated test (using flow sensor 17) or independently if the user chooses to perform a manual test.

Westervelt also discloses the parts under test may be sealed or having fixed orifices (Background) but not expressly closing a vapor recovery system under test. Mieczkowski only teaches closing the fuel tank and not expressly the vapor recovery canister.

Gross teaches the "invention checks the integrity of the evaporative emission control system [including a fuel tank and canister] by sealing the system from the atmosphere, applying a vacuum signal to the system and sensing the vacuum signal level at a predetermined point in the system. The system is sealed from the atmosphere by energizing the valve 46 thereby closing off the air input." Gross explains "These evaporative emission control systems are generally comprised of a combination of hoses, pipes and containments, such as the vapor collection canister and the fuel tank, connected with defined openings to the environment. Defects in such a system will typically show as a leak resulting from, for example, disconnected hoses or a loose or missing gas cap. Defects may further take the form of a restriction such as a pinched line."

It would have been obvious to one having ordinary skill in the art at the time the invention was made to close an entire vapor recovery system including the canister because defects may occur at various connections within the system.

Westervelt further discloses the calibration circuit is employed at the end of each test (either automatically or manually) and therefore precedes any subsequent test which anticipates "disconnecting the gas supply line and... gas flow meter from the leak tolerance standard and reconnecting the gas supply line and... gas flow meter to" a workpiece as in the instant invention. Sequencing of the valves 56 and 33 switches supply pressure from the workpiece to the calibrated leaks.

Comparison of the calibration and workpiece leak flow rates is performed either automatically with comparator system 48 or manually using visual flow gauge 62 as an alternative to the red and green lamp signals (column 5 lines 24-26).

The gauge 62 is depicted in idealized form and Westervelt does not reveal specifically what type of visual gauge is used.

Arnaud teaches a flow meter 36 may be "a glass tube and ball flow meter of the well known variety...which permits the operator to visually monitor the flow" (column 10 lines 3-7).

It would have been obvious to one having ordinary skill in the art at the time the invention was made use a ball type flow valve as they are "well known" "which permits the operator to visually monitor the flow". Selecting a "well known" device for monitoring flow would allow it to be easily adapted for use in Westervelt's invention.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Westervelet et al. (US Patent 3,872,712) as modified by Mieczkowski et al. (US Patent 5,898,108), Arnaud et al. (US Patent 4,198,374) and Gross (US Patent 5,275,144) and applied to claim 29 above and further in view of Adams (US Patent 4,462,249).

The references lack the non-flammable gas is carbon dioxide.

Adams discloses a leak test device including cylinder 41 providing gas used to pressurize a tank during a leak test. Adams teaches the "gas cylinder preferably contains nitrogen it can also be any other inert gas such as carbon dioxide".

It would have been obvious to one having ordinary skill in the art at the time the invention was made to pressurize a system with either nitrogen or carbon dioxide as both are inert and therefore will not react harmfully with the system or its contents.

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Westervelet et al. (US Patent 3,872,712) as modified by Mieczkowski et al. (US Patent 5,898,108), Arnaud et al. (US Patent 4,198,374) and Gross (US Patent 5,275,144) and applied to claim 29 above and further in view of Toback (US Patent 3,822,585).

The references lack the gas supply including a check valve in the supply line.

Toback teaches check valve 50 in line 51 from air source at 54.

This is done typically to maintain pressure if the source is disconnected or to prevent contamination of the source from backflow.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to dispose a check valve in the gas supply line in order to prevent backflow and thereby hold pressure and prevent contamination of the source.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2856

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles D. Garber whose telephone number is (571) 272-2194. The examiner can normally be reached on 6:30 a.m. to 3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Art Unit: 2856

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cdg



**CHARLES GARBER**  
**PRIMARY EXAMINER**